

TREASURE

Florida COASTS

and

ESTUARIES

miles of coastline 8,436

coastal population in 2000 15,982,378

fy03 czma core (section 306) funding \$2,000,000

fy03 czma enhancements (section 309) funding \$540,000

fy03 coastal nonpoint implementation

\$325,000

fy03 national estuarine research reserve operations, education, monitoring and stewardship

\$1,668,000

fy03 national estuarine research reserve land acquisition and construction

\$1,330,000

LORIDIANS, AND SCORES OF TOURISTS, ENJOY THE NATION'S SECOND
LONGEST COASTLINE—OVER 8,400 MILES OF TIDALLY INFLUENCED SHORELINE, WITH NO POINT IN THE STATE MORE THAN 65 MILES FROM THE
COAST. ALONG THESE COASTS, AN EVER-INCREASING HUMAN POPULATION
COEXISTS WITH MANY VALUABLE RESOURCES IN NEED OF PROTECTION,
INCLUDING BROAD COASTAL WETLANDS, VAST ESTUARIES AND SOME OF
THE MOST BEAUTIFUL BEACHES IN THE WORLD. THE COASTAL ZONE
MANAGEMENT ACT (CZMA) PROVIDES THE FRAMEWORK NECESSARY TO
SUSTAIN THE ECONOMIC AND ECOLOGICAL VALUE OF THESE COASTAL
AREAS. THIS LAW, WHICH IS ADMINISTERED BY THE NATIONAL OCEANIC
AND ATMOSPHERIC ADMINISTRATION (NOAA), RECOGNIZES A NATIONAL
INTEREST IN OUR COASTAL AND OCEAN AREAS. IT ALLOWS STATES AND
TERRITORIES, NOT THE FEDERAL GOVERNMENT, TO DETERMINE HOW BEST
TO BALANCE CONSERVATION OF THE COASTAL ENVIRONMENT WITH
HUMAN USES THAT DEPEND ON COASTAL RESOURCES.

THE CZMA IN FLORIDA

The CZMA establishes two programs to balance the use and protection of America's coasts. The Coastal Management Program gives states a flexible framework to address a broad range of community development, economic, and natural resource issues at the state and local level. The National Estuarine Research Reserve System protects key coastal areas for long-term scientific study, education, and resource stewardship.

Florida Coastal Management Program

Approved: 1981

Lead Agency: Department of Environmental Protection

Florida's Coastal Management Program coordinates among local, state, and federal entities involved in coastal management activities to protect coastal resources and help Floridians build and maintain vital communities. Based out of the Department of Environmental Protection, the coastal program coordinates among numerous local governments, as well as the eight state agencies and five water management districts implementing 23 separate statues—all which have responsibilities for aspects of coastal management. To accomplish its goals, the program works to integrate policies across natural and political boundaries.

Recent accomplishments of Florida's Coastal Management Program include:

- developing Florida Assessment of Coastal Trends and State of the Coast Report, the nation's first coastal environmental indicator system designed to provide information about coastal issues and problems to other decisionmakers and the general public;
- developing and producing uniform public beach access signs. These signs allow tourists and residents to recognize
 appropriate points of access to the beach and steer them away from inappropriate routes where their presence may
 disturb or harm nearby landowners and businesses, or fragile dunes, vegetation, and endangered species; and
- launching the Waterfronts Florida Partnership to provide assistance to participating communities to revitalize, renew, and promote interest in their waterfront districts.

Florida's National Estuarine Research Reserves

The Apalachicola, Guana Tolomato Matanzas, and Rookery Bay National Estuarine Research Reserves are part of a national network of coastal protected areas that conduct science, education, and resource stewardship. The reserve system is a partner-ship between NOAA and the states.

Apalachicola National Estuarine Research Reserve

Designated: 1979

Lead Agency: Department of Environmental Protection

The Apalachicola National Estuarine Research Reserve encompasses upland, floodplain, riverine, estuarine, and barrier island habitats. The Reserve covers over 246,000 acres in northwest Florida, one of the least populated areas of the state. It includes the lower Apalachicola River and Apalachicola Bay, one of the most productive estuarine systems in the Northern Hemisphere. More than 1,300 plant species have been identified within the Apalachicola drainage basin, with 103 of them listed as threatened or endangered.

RESEARCH: The Reserve participates in NOAA's System-wide Monitoring Program measuring water quality parameters. Over 12 years of 30-minute data from this program is available to visiting researchers. The reserve works with and manages listed species such as sea turtles and colonial migratory nesting birds. The reserve also works with local, state, and regional agencies on lessening the impacts of development on natural resources, and assists numerous visiting researchers on projects to help understand the ecology and dynamics of the river and bay system.

EDUCATION AND OUTREACH: The reserve maintains a nature/education center that houses exhibits and provides facilities for public education programs. It also sponsors guest lectures and special events for the community, and coastal management training opportunities for environmental professionals and coastal decisionmakers. The reserve offers field programs and nature center activities for K-12 students, college students, and seniors. Estuarine curricula, a newsletter, and other resources are available to educators and the public.

Guana Tolomato Matanzas National Estuarine Research Reserve

Designated: 1999

Lead Agency: Department of Environmental Protection

The Guana Tolomato Matanzas Reserve is the 25th and newest reserve in the national system. Located near St. Augustine, the reserve has two geographically distinct areas: a northern section, where the Tolomato and Guana rivers meet the Atlantic Ocean, and a southern section at the mouth of the Matanzas River.

RESEARCH: A relatively new reserve, the Guana Tolomato Matanzas Reserve has already built strong foundations in research, education, and stewardship and has its core staff in place. The reserve fully participates in the System-wide Monitoring Program and is active in areas such as fisheries monitoring, invasive exotic species monitoring, geographic information systems, and developing a remote sensor network for environmental data.

EDUCATION AND OUTREACH: The reserve has established a research and education facility in the town of Marineland in the southern section of the reserve, and has a major environmental education center under construction in the northern section of the reserve between St. Augustine and Jacksonville. The reserve education program is developing a Coastal Training Program to focus on the needs of coastal decisionmakers.

Rookery Bay Reserve

Designated: 1978

Lead Agency: Department of Environmental Protection

Located five miles south of Naples, the reserve has recently expanded its boundary and now encompasses 110,000 acres. The reserve is actively involved in restoration of altered ecosystems. Efforts include removal of abandoned roads, installation of culverts, removal of invasive exotic plants, and reestablishment of native plants.

RESEARCH: Research staff is working on hydrologic and habitat restoration projects. Geographic information systems archive information. Research staff and visiting investigators contribute to the System-wide Monitoring Program. Research topics include: mangrove die offs, shark biology, sea turtle research and monitoring, and oyster reef biology.

EDUCATION AND OUTREACH: Rookery Bay's 16,500 square foot Environmental Learning Center will be complete in 2003. The Learning Center will provide training and services to the communities of southwest Florida in one of the nation's fastest developing areas. This outreach will assist thousands of local management professionals, adult audiences, and elected officials make informed decisions about coastal resources.

PARTNERSHIPS IN ACTION

The Apalachicola National Estuarine Research Reserve has been working for over 5 years with the Florida Fish and Wildlife Conservation Commission, Northwest Florida Water Management District, Florida Department of Environmental Protection, U.S. Fish and Wildlife Service, U.S. Geological Survey, National Oceanic and Atmospheric Administration, as well as The Nature Conservancy and other nongovernmental organizations to help define the freshwater needs of the Apalachicola River and Bay system.

Changes to drainage patterns in South Florida have created problems with the impact of freshwater inflow, such as storm flooding, on fish and shellfish living in estuaries. With support from Florida's coastal program, the Rookery Bay National Estuarine Research Reserve developed a watershed restoration and management plan for local, state, and federal agencies. The plan made specific recommendations for restoring surface water sheet flow and tidal range, which enables estuaries to maintain natural salinity levels during storms. This work led to the removal of abandoned roadbeds and exotic species during several recent highway improvement and airport expansion projects.